```
=> fil reg; d que 12
FILE 'REGISTRY' ENTERED AT 15:45:54 ON 12 JAN 2004
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```

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 9 JAN 2004 HIGHEST RN 635758-32-6 DICTIONARY FILE UPDATES: 9 JAN 2004 HIGHEST RN 635758-32-6

TSCA INFORMATION NOW CURRENT THROUGH JULY 14, 2003

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at: http://www.cas.org/ONLINE/DBSS/registryss.html

L2

6 SEA FILE=REGISTRY ABB=ON CCCUUUAGUUUCUCGCUUUAGUGGGGUUAUUGGUC AGCAUCACACAAAAAAGUCAUGCUGCCUUCUUUACAACCGUGAUCAUUCCAGCCAUUGUU GGGGG | CCCCCAACAAUGGCUGGAAUGAUCACGGUUGUAAAGAAGGCAGCAUGACUUUUUUGU GGUGUGAUGCUGACCAAUAACCCCACUAAAGCGAGAGAAACUAAAGGG/SQSN Sey 126 8 its complement

=> d rn cn sql kwic nte lc 1-6

1.2 ANSWER 1 OF 6 REGISTRY COPYRIGHT 2004 ACS on STN

RN 417995-53-0 REGISTRY

CN GenBank AB057126 (9CI) (CA INDEX NAME)

SOL 223

= sequence length

SEQ 1 ccctttagtt tctctcgctt tagtggggtt attggtcagc atcacaccac

> 51 aaaaaagtca tgctgccttc tttacaaccg tgatcattcc agccattgtt

101 gggggtatcg ctacaggtgc tgctgtagga acggtctcag ggcttcttgg

HITS AT: 1-105

STN Files: **GENBANK**

RN 392992-38-0 REGISTRY

CN GenBank BD009535 (9CI) (CA INDEX NAME)

SQL

LC

L2

1 ccctttagtt tctctcgctt tagtggggtt attggtcagc atcacaccac SEQ

ANSWER 2 OF 6 REGISTRY COPYRIGHT 2004 ACS on STN

51 aaaaaagtca tgctgccttc tttacaaccg tgatcattcc agccattgtt

101 ggggg

HITS AT: 1-105

RELATED SEQUENCES AVAILABLE WITH SEOLINK

STN Files: GENBANK

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ANSWER 3 OF 6 REGISTRY COPYRIGHT 2004 ACS on STN
L2
RN
    392992-37-9 REGISTRY
CN
    GenBank BD009534*(9CI) (CA INDEX NAME)
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SEO
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        101 ggggg
HITS AT:
        1-105
**RELATED SEQUENCES AVAILABLE WITH SEQLINK**
    STN Files:
             GENBANK
    ANSWER 4 OF 6 REGISTRY COPYRIGHT 2004 ACS on STN
L2
RN
    385888-56-2 REGISTRY
    GenBank AJ390719* (9CI) (CA INDEX NAME)
CN
SQL 105
SEQ
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        =====
HITS AT:
        1-105
**RELATED SEQUENCES AVAILABLE WITH SEQLINK**
   STN Files: GENBANK
    ANSWER 5 OF 6 REGISTRY COPYRIGHT 2004 ACS on STN
1.2
RN
    251882-25-4 REGISTRY
CN
   GenBank AJ390718 (9CI) (CA INDEX NAME)
SQL
   105
SEQ
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        101 ggggg
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HITS AT:
        1-105
**RELATED SEQUENCES AVAILABLE WITH SEQLINK**
   STN Files:
            CA, CAPLUS, GENBANK, TOXCENTER
L2
   ANSWER 6 OF 6 REGISTRY COPYRIGHT 2004 ACS on STN
RN
   206670-30-6 REGISTRY
CN
   DNA (Helicobacter pylori clone N3001 vacA gene fragment) (9CI) (CA INDEX
   NAME)
SQL
   105
SEQ
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        51 aaaaaagtca tgctgccttc tttacaaccg tgatcattcc agccattgtt
        101 ggggg
        =====
HITS AT:
        1-105
**RELATED SEQUENCES AVAILABLE WITH SEQLINK**
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LC STN Files: CA, CAPLUS, USPATFULL

=> fil capl toxcenter uspatfull; s 12 FILE 'CAPLUS' ENTERED AT 15:46:29 ON 12 JAN 2004 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2004 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'TOXCENTER' ENTERED AT 15:46:29 ON 12 JAN 2004 COPYRIGHT (C) 2004 ACS

FILE 'USPATFULL' ENTERED AT 15:46:29 ON 12 JAN 2004 CA INDEXING COPYRIGHT (C) 2004 AMERICAN CHEMICAL SOCIETY (ACS)

L3 6 L2

=> dup rem 13

PROCESSING COMPLETED FOR L3

5 DUP REM L3 (1 DUPLICATE REMOVED) ANSWERS '1-3' FROM FILE CAPLUS ANSWERS '4-5' FROM FILE USPATFULL

=> d ibib ab hitrn 1-5; fil hom

ANSWER 1 OF 5 CAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 1

ACCESSION NUMBER:

2001:156517 CAPLUS 134:203312

DOCUMENT NUMBER: TITLE:

Expanding allelic diversity of Helicobacter pylori

vacA. [Erratum to document cited in CA129:326775]

van Doorn, Leen-Jan; Figueiredo, Ceu; Sanna, Ricardo; Pena, Salvador; Midolo, Peter; Ng, Enders K. W.; AUTHOR(S):

Atherton, John C:; Blaser, Martin, J.; Quint, Wim G.

CORPORATE SOURCE:

SOURCE:

Delft Diagnostic Laboratory, Delft, 2625 AD, Neth.

Journal of Clinical Microbiology (2000), 38(6), 2464

CODEN: JCMIDW; ISSN: 0095-1137 American Society for Microbiology

PUBLISHER: DOCUMENT TYPE:

Journal

LANGUAGE:

English

The following paragraph should be inserted at the end of Materials and Methods: "Nucleotide sequence accession nos. The nucleotide sequences of vacA have been deposited in the GenBank database under accession no. AJ390591 to AJ390744.".

251882-25-4, GenBank AJ390718

RL: PRP (Properties)

(nucleotide sequence; expanding allelic diversity of Helicobacter pylori vacA (Erratum))

ANSWER 2 OF 5 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER:

2001:156514 CAPLUS

DOCUMENT NUMBER:

134:203200

TITLE:

IT

Typing of Helicobacter pylori vacA gene and detection

of cagA gene by PCR and reverse hybridization.

[Erratum to document cited in CA129:90935]

AUTHOR(S):

van Doorn, L, J.; Figueiredo, C.; Rossau, R.; Jannes,

G.; van Asbroeck, M.; Sousa, J. C.; Carneiro, F.;

Quint, W. G. V.

CORPORATE SOURCE:

Delft Diagnostic Laboratory, Delft, Neth.

SOURCE:

Journal of Clinical Microbiology (2000), 38(6), 2464

CODEN: JCMIDW; ISSN: 0095-1137

PUBLISHER:

American Society for Microbiology

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DOCUMENT TYPE:
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Journal English

LANGUAGE:
AB The

The following paragraph should be inserted at the end of Materials and Methods: "Nucleotide sequence accession nos. The nucleotide sequences of vacA and cagA genes have been deposited in the GenBank database under accession no. AJ390591 to AJ390744 and AJ269852 to AJ269897.".

IT 251882-25-4, GenBank AJ390718

RL: PRP (Properties)

(nucleotide sequence; typing of Helicobacter pylori vacA gene and detection of cagA gene by PCR and reverse hybridization (Erratum))

L4 ANSWER 3 OF 5 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER:

1998:256194 CAPLUS

DOCUMENT NUMBER:

128:304781

TITLE:

Probes and primers for the vacA and cagA genes of Helicobacter and the diagnosis and prognosis of

infection

INVENTOR(S):

Quint, Wilhelmus; Van Doorn, Leendert-Jan

PATENT ASSIGNEE(S):

Innogenetics N.V., Belg.; DDL B.V.; Quint, Wilhelmus;

Van Doorn, Leendert-Jan PCT Int. Appl., 122 pp.

SOURCE:

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

	PAT	CENT							APPLICATION NO.						DATE			
	WO				A2		19980423		WO 1997-EP5614						19971010			
		9816658																
		W:								BG.	BR.	BY.	CA.	CH.	CN,	CII.	C7.	DE.
															KG,			
															MX,			
															TT,			
								AZ,								,	· - /	,
		RW:	GH,	KE,	LS,	MW,	SD,	SZ,	UG,	ZW,	AT,	BE,	CH,	DE,	DK,	ES,	FI,	FR.
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	AU	9748669		A1		19980511			AU 1997-48669 19971010									
	AU	732099				20010412												
	EΡ	946747		A2		19991006			EP 1997-911215 19971010									
		R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,
							FI,											
									JP 1998-518004									
								US 2001-35978										
	US 2003175746					A1 20030918			US 2002-263594					4	20021002			
PRIOF	IORITY APPLN. INFO.:													Α	1996	1016		
												87013			1997			
									WO 1997-EP5614 W									
									US 1999-284725									
כו ע			_			_									20000			

AB Primers and probes for detection of alleles of the vacA and cagA genes of Helicobacter pylori that can be used in the diagnosis of the disease and in the typing of the strain involved for prognosis of infection are described. Similar probes and primers may be used for the detection of other virulence genes.

IT 206670-30-6

RL: BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(nucleotide sequence, primers and probes derived from; probes and primers for vacA and cagA genes of Helicobacter and diagnosis and prognosis of infection)

Page 5

ANSWER 4 OF 5 USPATFULL on STN

ACCESSION NUMBER:

2003:250960 USPATFULL

TITLE:

Probes, methods and kits for detection and typing of Helicobacter pylori nucleic acids in biological samples

INVENTOR(S):

Quint, Wilhelmus, Nootdorp, NETHERLANDS

Van Doorn, Leendert-Jan, Ridderkerk, NETHERLANDS

NUMBER KIND DATE

PATENT INFORMATION:

APPLICATION INFO.:

US 2003175746 A1 20030918 US 2002-263594 A1 20021002 (10)

RELATED APPLN. INFO.:

Continuation of Ser. No. US 2000-531037, filed on 20

Mar 2000, ABANDONED Division of Ser. No. WO 1998-EP9705614, filed on 23 Apr 1998, UNKNOWN

NUMBER

PRIORITY INFORMATION:

EP 1997-870133 19970909 EP 1996-870131 19961016

DOCUMENT TYPE:

Utility

FILE SEGMENT:

APPLICATION

LEGAL REPRESENTATIVE:

KNOBBE MARTENS OLSON & BEAR LLP, 2040 MAIN STREET,

FOURTEENTH FLOOR, IRVINE, CA, 92614

NUMBER OF CLAIMS:

EXEMPLARY CLAIM: NUMBER OF DRAWINGS:

66 Drawing Page(s)

LINE COUNT:

4267

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to a method for the detection and/or typing of Helicobacter pylori (H. pylori) strains present in a sample including the steps of (i) amplifying the polynucleic acids of target regions of the vacA gene and the cagA gene, with suitable primer pairs, the primers being generally applicable on different H. pylori strains, where the target regions include a conserved region in the case of the cagA alleles and a variable region in the case of the vacA alleles; (ii) hybridizing the polynucleic acids obtained with a set of at least two VDG (virulence determinant gene)-derived probes, and with at least one of the probes hybridizing to a conserved region of a cagA of H. pylori, and with at least one of the probes hybridizing to a variable region of vacA; (iii) detecting the hybrids formed; and (iv) detecting and/or typing H. pylori strains present in a sample from the differential hybridization signals obtained. The present invention also relates to probes and primers for doing the same as well as Helicobacter pylori detecting/typing kits.

ΙT 206670-30-6

> (nucleotide sequence, primers and probes derived from; probes and primers for vacA and cagA genes of Helicobacter and diagnosis and prognosis of infection)

ANSWER 5 OF 5 USPATFULL on STN

ACCESSION NUMBER:

2003:237703 USPATFULL

TITLE:

Probes, methods and kits for detection and typing of Helicobacter pylori nucleic acids in biological samples

INVENTOR(S):

Quint, Wilhelmus, Nootdorp, NETHERLANDS

Van Doorn, Leendert-Jan, Ridderkerk, NETHERLANDS

NUMBER KIND DATE ` PATENT INFORMATION:

APPLICATION INFO.:

US 2003165860 A1 20030904 US 2001-35978 A1 20011221 (10)

RELATED APPLN. INFO.:

Continuation of Ser. No. US 1999-284725, filed on 16 Apr 1999, ABANDONED A 371 of International Ser. No. WO 1997-EP5614, filed on 10 Oct 1997, UNKNOWN

DOCUMENT TYPE: Utility FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: KNOBBE MARTENS OLSON & BEAR LLP, 2040 MAIN STREET,

FOURTEENTH FLOOR, IRVINE, CA, 92614

NUMBER OF CLAIMS: 24 EXEMPLARY CLAIM: 1

PRIORITY INFORMATION:

NUMBER OF DRAWINGS: 61 Drawing Page(s)

LINE COUNT: 3996

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

The present invention relates to a method for the detection and/or typing of Helicobacter pylori (H. pylori) strains present in a sample comprising the steps of: (i) if need be releasing, isolating or concentrating the polynucleic acids in the sample, (ii) amplifying the polynucleic acids of relevant target regions of the vacA gene and possibly other virulence determinant genes (VDG), with suitable primer pairs, said primers being generally applicable on different H. pylori strains, allowing to amplify said relevant target regions of the VDG preferentially in compatible amplification conditions; (iii) hybridizing the polynucleic acids obtained in (i) or (ii) with a set of at least two VDG-derived probes, under appropriate hybridization and wash conditions, and with at least one of said probes hybridizing to a conserved region of a VDG of H. pylori, and with at least one of said probes hybridizing to a variable region of vacA; (iv) detecting the hybrids formed in step (iii), (v) detecting and/or typing H. pylori strains present in a sample from the differential hybridization signals obtained in step (iv), with said typing being the allele-specific detection of a strain according to the VDG alleles present in that particular H. pylori strain, and the said virulence determinant genes being the genetic elements involved in enabling, determining, and marking of the infectivity and/or pathogenicity of said H. pylori strain. The present invention also relates to probes and primers for doing the same as well as Helicobacter pylori detecting/typing kits. The present invention also discloses novel sequences of VDG, which can be used for designing the above-mentioned primers and probes.

IT 206670-30-6

(nucleotide sequence, primers and probes derived from; probes and primers for vacA and cagA genes of Helicobacter and diagnosis and prognosis of infection)

FILE 'HOME' ENTERED AT 15:46:47 ON 12 JAN 2004